SNOMED CT® Encoded Cancer Protocols

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ABSTRACT

SNOMED Clinical Terms® (SNOMED CT®) is being used to encode the Cancer Protocols published by the College of American Pathologists (CAP). As of January 1, 2004, one of the standards set for approved cancer programs by the American College of Surgeons Commission on Cancer will be that at least 90% of surgical pathology reports contain all essential data elements identified in the CAP Cancer Protocols.

INTRODUCTION

Encoding each line item on a cancer checklist with a SNOMED CT concept that uniquely captures its meaning should simplify reporting for cancer registries and improve retrieval and analysis of cancer data.

Variations in format styles across checklists were one obstacle to encoding the checklists. A second difficulty was representing context that is imparted to a line item on a checklist by its position within the checklist.

DISCUSSION

Below is a section from the Colon Checklist:

SPECIMEN INTEGRITY
___ Intact
___ Fragmented
Number of pieces: _____

This section asks two questions:
1. What is the integrity of the specimen submitted?
2. If the specimen is fragmented, how many pieces are there?

It offers three choices for answers:
1. The specimen is intact.
2. The specimen is fragmented.
3. The number of pieces in the fragmented specimen is…. (Free text).

The general approach to coding items on the checklist that ask questions has been to use concepts from the SNOMED CT *Observable Entity* hierarchy. The answers to these questions can be chosen from concepts in any of several hierarchies. Primarily, they are found in the *Finding, Disorder,* or *Morphologic Abnormality* hierarchies.

For the Colon Checklist section previously discussed, the SNOMED CT concepts chosen are represented in italics below:

SPECIMEN INTEGRITY *Specimen integrity (observable entity)*
___ Intact *Tissue specimen intact (finding)*
___ Fragmented *Tissue specimen fragmented (finding)*
Number of pieces: ___ *Number of pieces in fragmented specimen (observable entity)*

Answers to questions that allow free text will not be coded. Thus, possible answers to *Number of pieces in fragmented specimen (observable entity)* will not be coded.

SNOMED CT concept names, or their synonyms, will not always be an exact match for the wording of the line they represent on a checklist. For example, *Tissue specimen intact (finding)* will not have a synonym of *Intact.*

If appropriate, a synonym matching or similar to the checklist wording may be assigned to a SNOMED CT concept. On the Breast Checklist, for **HISTOLOGIC TYPE,** one possible choice is **Secretory (juvenile)**. The appropriate SNOMED CT concept for that line is *Juvenile carcinoma of the breast (morphologic abnormality)* with its synonym of *Secretory carcinoma of the breast.*

CONCLUSION

Encoding the Cancer Protocols with SNOMED CT is intended to enhance the value of the pathology report and save the user valuable time and reduce coding errors. The goal of coding the checklists is to consistently capture the explicit meaning of each checklist item.